

22s:039

Homework 9

Assigned Friday, October 30

Due Wednesday, November 4

Chapter 7: Sampling Distributions and Point estimation of parameters

For each book problem, provide the solution and any work that can be used for partial credit.

7-10

7-11

7-13

Also, do the following problems:

- 9A-1. A random sample of size 40 is taken from a population with a mean of 75 and a variance of 10. What is the approximate 85th percentile of the sampling distribution for \bar{X} ?
- 9A-2. Suppose the $\hat{\theta}_1$ and $\hat{\theta}_2$ are both unbiased estimators of the parameter θ . We know that the $V(\hat{\theta}_1) = 10$ and $V(\hat{\theta}_2) = 4$. Which estimator is best and in what sense is it 'best'?